D. harrisii. — Labrum nearly truncate in middle; coxal processes not produced, blunt; thorax at base, apex and sides broadly bordered with yellow. Females dimorphic.

Cybister fimbriolatus.—Distinguished by its wedge-like, instead of regularly oval shape and the generic characters.

Class I, HEXAPODA.

Order IV, DIPTERA.

BRIEF NOTES ON MOSQUITOES.

By Harrison G. Dyar, A.M., Ph.D., Washington, D. C.

DISTRIBUTION OF THEOBALDIA ABSOBRINUS FELT. — In reëxamining my series of *Theobaldia incidens* from British Columbia (Pro. ent. soc. Wash., vi, 38, 1904), I find it to contain a mixture of a second species which I am able to identify with *T. absobrinus* Felt, both by the larvæ and male genitalia of the adults. This greatly extends the known distribution of this form which was described from northern New York.

IDENTITY OF CULEX CONSOBRINUS DESV. — We have examined material collected by Mr. August Busck in St. Louis, Missouri, which Mr. Coquillett considers to be *C. consobrinus, and recognize it as C. magnipennis Felt. It is altogether probable that magnipennis is a synonym of consobrinus, as we know of but the one larval form and the male genitalia of Mr. Busck's specimens agree exactly with Dr. Felt's figure. Dr. Felt did not know consobrinus in describing magnipennis. The species will find place in the genus Theobaldia, or rather Culiseta since Theobaldia is preoccupied by Theobaldius Nevill, as Mr. Cockerell has pointed out to me.

EXCLUSION OF THE NAME "CULEX REPTANS."—Linnæus described a *Culex reptans*, which is not a mosquito, but, on the principle of "once a synonym, always a synonym" the use of the name is precluded in any other sense. The name "*Culex reptans* Meig." must therefore cease to be used.

HIBERNATION OF THE HOLLOW TREE SPECIES. — Of the two spe-

cies of mosquitoes whose larvæ normally live in the water in hollow trees, Pneumaculex signifer Coq. and Grabhamia triseriata Say, I have shown that the latter hibernate in the egg state. The former, it now appears, hibernate in the larval state. Mr. Busck brought a number of P. signifer larvæ from St. Louis in the Fall and they showed no disposition to transform. The two predaceous species of the hollow trees, Anopheles barberi Coq. and Megarhinus portoricensis von Rod. likewise hibernate as larvæ. I have observed this in the case of the Anopheles formerly and Mr. Busck's Megarhinus, brought with the Pneumaculex, has lived all winter in the laboratory. It would appear as if the Pneumaculex, must suffer more from the predaceous habits of the other species that the Grabhamia does, since it is longer coexistent with them in the larval state.

RELATIONSHIP OF CULEX INCONSPICUUS GROSSBECK. — The figures of fragments of the larva of this species given on page 297 of Smith's Report on Mosquitoes (1905) show it to be allied to the species described by Felt and Young as *Culex lazarensis*. However, the male genitalia of *inconspicuus* as figured differ from those of *lazarensis* as figured even to a generic degree. *Inconspicuus* falls in *Culicelsa* while *lazarensis* belongs to *Grabhamia*. This looks like a disagreement between larval and genitalic characters which is unusual, and may indicate that the genus *Culicelsa* is not well founded or that the association of larvæ and adults under *C. inconspicuus* is inaccurate (see also Proc. ent. soc. Wash., vii, 48, 1905).

Generic location of Culex discolor Coq. — I included this species among the unidentified list under the genus *Grabhamia* (Proc. ent. soc. Wash., vii, 48, 1905), but Smith's figures recently at hand show it to be referable to the genus *Feltidia*. The larva differs from the other larvæ of *Feltidia* known to us, among other things, in that the air tube is not inflated. Its characters are, as it were, curiously reversed, for it is the antennæ, on the opposite end of the larva, that are inflated.

Deinocerites cancer Theob. In the United States. — In a recent brief tour of Florida by Mr. Caudell and myself, this Jamaican species was discovered at Miami. Dr. Grabham describes the larva as living in crab holes, and these were accordingly searched. At the time of our visit (March), there had been no rain for weeks and all the holes were dry, so that, except for a fortuitous circumstance, the species would have been missed. It happened that opposite Miami a canal is being

cut through the peninsula, and the salt water from the dredging operations filled three or four holes at the edge of the mangrove swamp on the Biscayne Bay side. In one of these holes several larvæ were found, which had just hatched from the influence of the water. The species must pass the dry season in the egg state.

Habits of Culex trichurus Dyar. — As already shown, this species has a northern distribution throughout North America. The larvæ are among the earliest appearing of the early Spring species. They inhabit open grassy pools, swamps and woods pools, not in large numbers, but rather generally distributed. In April, 1905 (a backward season), we found all the largest larvæ in several collections at Chicopee, Mass., and Plattsburgh, N. Y., to be of this species. The larvæ descend easily to the bottom when disturbed where they wriggle in the mud, so that deep dipping is required to collect them. They soon seek the surface however. The larvæ are light in color, rather yellowish, and can be picked out from the other inhabitants of the pools by this character and their size without a lens.

Class I, HEXAPODA.

Order V, LEPIDOPTERA.

SOUND PRODUCED BY LEPIDOPTEROUS LARVÆ.

By Harry Federley, Helsingfors, Finland.

In No. 2, Vol. XII, of this Journal Professor Packard has published some observations upon sound produced by caterpillars. On Professor Packard's request for information regarding this question the editor has appended some. As I have been occupied during the last few years with the rearing of lepidopterous larvæ and have also made some observations regarding the production of sound by these creatures, I beg to herewith communicate the same.

The larva of the North American Saturnian moth *Telea polyphemus* can, in the third and fourth stages, by rubbing the powerfully constructed mandibles against each other produce a tolerably loud, tapping sound, which is audible at the distance of several meters. That here is question of a means of intimidation is not to be doubted, for